

AMENDMENTS TO THE CLAIMS:

Please amend the claims as follows:

1. (Currently amended) A bipolar transistor comprising:

a substrate;

a intrinsic base region having a silicon buffer layer comprised of silicon which is formed on said substrate, and a composition-ratio graded base layer which is formed on the silicon buffer layer and comprises silicon and at least germanium and where a composition ratio of the germanium to the silicon in the composition-ratio graded base layer varies in a thickness direction of the composition-ratio graded base layer; and

an extrinsic base region having an extrinsic base formation layer comprised of silicon which is formed on said substrate and adjacent to the silicon buffer layer;

wherein a thickness of the extrinsic base formation layer is substantially equal to a thickness of the silicon buffer layer.

each of the extrinsic base formation layer and the silicon buffer layer has a thickness of not less than 40nm, and

a surface of the extrinsic base formation layer is silicided.

2. (Cancelled)

3. (Currently Amended) [[A]] The bipolar transistor according to Claim 1, wherein the composition-ratio graded base layer is a ~~silicon-germanium~~ silicon-germanium graded base layer which comprises silicon and germanium.

4. (Currently amended) [[A]] The bipolar transistor according to Claim 1, wherein the silicon buffer layer is comprised of monocrystal and the extrinsic base formation layer is comprised of polycrystal.

5. (Withdrawn) A method of manufacturing a bipolar transistor comprising:
a step of forming a masking layer on a substrate to enclose a region including the active region;

a step of forming an epitaxial base layer such that the epitaxial base layer has a silicon layer and a silicon-germanium layer in the active region;

a step of, non-selectively with respect to the epitaxial base layer, forming a poly-base layer which comprises a silicon layer and a silicon-germanium layer in an isolation region of the region including the active region; and

a step of thereafter removing the silicon-germanium layer of the poly-base layer by etching process to expose a surface of the silicon layer as an extrinsic base formation layer, and

a step of forming a silicide layer on the exposed surface.

6. (Withdrawn - Currently amended) [[A]] The method of manufacturing a bipolar transistor according to Claim 5, wherein the etching process is a wet etching which uses an etchant made of a mixture comprising nitric acid, water and fluorinated acid.

7. (Currently amended) [[A]] The bipolar transistor according to Claim [[2]] 1, wherein the composition-ratio graded base layer is a ~~silicon-germanium~~ silicon-germanium graded base layer which comprises silicon and germanium.

8. (Currently amended) [[A]] The bipolar transistor according to Claim [[2]] 1, wherein the silicon buffer layer is comprised of monocrystal and the extrinsic base formation layer is comprised of polycrystal.

9. (New) The bipolar transistor according to claim 1, wherein each of the extrinsic base formation layer and the silicon buffer layer has a thickness of not less than 60 nm and not more than 120 nm.